

Introduction to Bioinformatics

Material for Exam #2

Questions for each of the exams will be taken (with some modification) from the various Problem Sets, Study Questions, and tours covered since the last exam. For Exam #2, the following are fair game:

Problem Set 4: Practice with loops and mapping

Problem Set 5: Genome analysis investigations

Study Questions from notes for:

Search for FMRP in *Drosophila*

Introduction to mapping

Tour of Edwards and Rohwer (2005). *Nature Rev Microbiol* 3:504-510

Viral Metagenomics.

Elements of a loop

Notes regarding Karlin (2001). *Trends in Microbiology* 9:335-343.

Detecting anomalous gene clusters and pathogenicity islands in diverse bacterial genomes.

Sequence Contrasts

Gene regulation

Tour #3 – *Mendel Simulation*

... and that's it. If you can solve these problems and answer the questions, you should be able to do the same readily on the exam.

For more, see *Course at a Glance, Objectives and Strategies, Integrative Exams*